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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,793	05/04/2001	Shyh-Mei F. Ho	SVL920010041US1	1989

45728 7590 08/22/2005

SAWYER LAW GROUP LLP
2465 EAST BAYSHORE ROAD, SUITE 406
PALO ALTO, CA 94303

EXAMINER

HA, THANH T

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/849,793

Applicant(s)

HO ET AL.

Examiner

Ha Thanh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

PD

DETAILED ACTION

1. Claims 1-12 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duxbury et al. (hereafter Duxbury) (U.S. Patent 5604896), in view of Baisley et al. (hereafter Baisley) (U.S. Patent 6292932 B1).

4. As to claim 1, Duxbury teaches the invention substantially as claimed including a method of processing an application request on an end user application and an application server including a mapping support language comprising the steps of:

- a. Initiating the application request on the end user application in a first language with a first application program [col. 1, lines 32-34];
- b. Transmitting the application request to the server and converting the application request from the first language of the first end user application to a form for the mapping support language running on the application server [col. 1, lines 35-37];

- c. Processing said application request on the application server [col. 3, lines 15-18];
- d. Transmitting a response to the application request from the application server to the end user application, and converting the response to the application request from the mapping support language running on the application server to the first language of the first end user application [col. 3, lines 23-27];
- e. Wherein the end user application and the application server have at least one connector therebetween [col. 2, line 36], and the steps of (i) converting the application request from the first language of the first end user application as a source language to the language running on the application server as a target language, and (ii) converting a response to the application request from the language running on the application server as a source language to the first language of the first end user application as a target language [col. 8, lines 45-50].

5. Duxbury does not specifically teach:

- a. invoking connector metamodels of respective source language and target mapping support language;
- b. populating the connector metamodels with metamodel data of each of the respective source language and target mapping support

language, the metamodel data of the target mapping support

language including a map, mapset, and a mapfield; and

c. converting the source language to the mapping support language.

6. However, Baisley teaches:

a. A source metamodel [col. 3, line 39] and a target mapping support language [col. 3, 40-41].

b. the UML model has other information, either as tags or in an external representation [col. 3, lines 48-50] and the metamodel maps data type and attributes in derived data types, maps the derived attributes to aliases of the supertype [col. 4, lines 3-8].

c. converts UML model to a MOF model [col. 3, line 44].

7. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teaching of Duxbury and Baisley because Baisley's method of using metamodel for the mapping support would provide a predictable and reliable mapping between the original source language and the target language to Duxbury's system.

8. As to claim 2, Duxbury teaches the end user application is a web browser [col. 2, line 16].

9. As to claim 3, Duxbury teaches the end user application is connected to the application server through a web server, and the web server comprises a connector [col. 2, lines 37-39].

10. As to claim 4, Duxbury does not specifically teach the method as set forth in claim 1 wherein the metamodel comprises invocation metamodel data, application domain interface metamodel data, transaction message metamodel data, and type descriptor metamodel data.

11. However, Baisley disclosed repository model typically contain classes, datatypes, and messages [col. 1, lines 31-32], and said that “repositories provide a central place for recording metadata and enable one to store, manage, share and reuse information about data (i.e. metadata) that an enterprise uses” [col. 1 lines 20-23].

12. It would have been obvious to one of ordinary skill in the art at the time the invention was made, to have combine the teaching of Duxbury’s method to Baisley’s invention using the motivation set forth in Baisley’s teaching.

13. As to claims 5-7, these are transaction processing system claims that correspond to the method claims 1-3. Therefore, they are rejected for the same reason as claims 1-3 above.

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14. As to claims 8-10, these are transaction processing system configured and controlled to interact with a client application claims that correspond to the method claims 1-3. Therefore, they are rejected for the same reason as claims 1-3 above.

15. As to claim 11, this is program product claims that correspond to the method claim 1. Duxburry does not specifically teach computer instructions for building a metamodel data repository of source and target language metamodel data. However, Baisley teaches the Unified Modeling Language, or "UML", which may be used to model metamodels, which will later be translated into "MOF" metamodel. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have applied the same concept taught by Baisley and came up with computer instruction for building metamodel data repository to speed up process.

16. As to claim 12, this is program product claims that correspond to the method claim 4. Therefore, it is rejected for the same reason as claim 4 above.

Response to Arguments

17. Applicant's arguments filed 03/24/2005 for claims 1-12 have been fully considered but are not persuasive.

18. In the remarks, Applicant argued in substance that:

- a. There is no mention of “converting a response to the application request from the language running on the application server as a source language to the first language of the first end user application as a target language”.
- b. Duxbury does not teach 1) invoking connector metamodels of respective source language and target mapping support language; 2) populating the connector metamodels with metamodel data of each of the respective source language and target mapping support language, the metamodel data of the target mapping support language including a map, mapset, and a mapfield; and 3) converting the source language to the mapping support language.

19. Examiner respectfully traversed Applicant's remarks:

- c. As to point (a), Dialogue is a conversation between two people, and language is a tool for conversation. Therefore, convert a dialogue constitutes convert a language. Duxbury teaches “converts this request into a dialogue (“language”) with the remote (“target”) application, so as to perform the desired transfer and to send a response back to the client”. Therefore, Duxbury clearly teaches “converting” from the source language to the target language.
- d. As to point (b), 1) the invoking of the connector of the metamodel is obvious since, based on the succeeding steps, if the connector of the metamodel was not invoked, there was no metamodel to be

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populated 2) Baisley discloses populating the metamodels with metamodel data as states in col. 3, lines 47-49 "any other information needed can be recorded ("populating") either as tags in the UML model or in an external representation". 3) In addition, Baisley discloses mapfields ("elements of the UML model") are mapped to instances ("mapset") of MOF Data Type [col. 3, lines 55-57], and map ("alias") [col. 4, lines 7-16].

20. THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Navarre et al. (U.S. Patent 6205482 B1)

Xia (U.S. Patent 6542900 B1)

Mishra (U.S. Patent 6345315 B1)

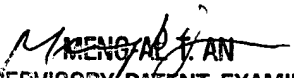
Marmor (U.S. Patent 6601108 B1)

Regnier et al. (U.S. Patent 6134549)

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ha Thanh whose telephone number is 571-272-7220. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MENG-AI AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1

Thanh Ha
Examiner AU 2194